



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/845,317	05/01/2001	Naomi Noda	WATK : 212	2258

7590 05/21/2003

PARKHURST & WENDEL, L.L.P.
1421 Prince Street, Suite 210
Alexandria, VA 22314-2805

EXAMINER

JOHNSON, EDWARD M

ART UNIT	PAPER NUMBER
----------	--------------

1754

DATE MAILED: 05/21/2003

5

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/845,317

Applicant(s)

NODA ET AL.

Examiner

Edward M. Johnson

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-8, "the carrier-composing material" lacks antecedent basis.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 1754

4. Claims 1-2 and 5-8 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 97/47864.

Regarding claim 1, WO '864 discloses a catalyst comprising a support for a catalyst layer containing potassium (see page 17, first full paragraph), wherein the support contains 0.6-5 wt% silica (see page 19, third full paragraph).

Regarding claim 2, WO '864 discloses 0.6-5 wt% silica (see page 19, third full paragraph).

Regarding claim 5, WO '864 discloses magnesium (see page 18, first paragraph).

Regarding claim 6, WO '864 discloses potassium (see page 17, first full paragraph).

Regarding claim 7, WO '864 discloses a honeycomb shape (see page 21, first full paragraph).

Regarding claim 8, WO '864 discloses Pt, Rh, and Pd (see page 19, second full paragraph).

5. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Freudenberg et al. US 5,153,153.

Regarding claim 1, Freudenberg '153 discloses catalysts comprising MgO on a 2.5-5% silica support (abstract).

Regarding claim 2, Freudenberg '153 discloses 2.5-5% silica (see abstract).

Art Unit: 1754

Regarding claim 3, Freudenberg '153 discloses TECs of $0.75 \times 10^{-6}/K$ to $2.9 \times 10^{-6}/K$ (see Table IV).

Regarding claim 4, Freudenberg '153 discloses aluminum titanate (title).

Regarding claim 5, Freudenberg '153 discloses MgO (abstract).

6. Claims 1-2 and 4-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Hori et al. US 6,555,081.

Regarding claim 1, Hori '081 discloses an exhaust gas purification catalyst comprising a carrier for an alkali metal (abstract), wherein the carrier contains 5% silica (see Example 4).

Regarding claim 2, Hori '081 discloses 5% silica (see Example 4).

Regarding claim 4, Hori '081 discloses aluminum titanate (see column 7, lines 39-41).

Regarding claim 5, Hori '081 discloses magnesium (see column 5, lines 41-42).

Regarding claim 6, Hori '081 discloses potassium (see column 5, lines 41-42).

Regarding claim 7, Hori '081 discloses honeycomb carrier (see column 7, lines 41-47).

Regarding claim 8, Hori '081 discloses platinum and palladium (see abstract).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Gugel et al. US 5,288,672 discloses catalyst comprising 0.5 to 10% by weight of silica and aluminum titanate (see title, abstract, and Examples); Hughes US 5,985,220 discloses catalysts comprising improved resistance to thermal expansion (see abstract, Examples).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward M. Johnson whose telephone number is 703-305-0216. The examiner can normally be reached on M-F 6:30-4:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley S. Silverman can be reached on 703-308-3837. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Art Unit: 1754

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

EMJ

May 14, 2003


Supervisor of Examiner
Technology Center 1700